



ONGC News as on 20th June 2023 (Print)

HPCL bags long-term gas contract from OPaL

Our Bureau

New Delhi

Hindustan Petroleum Corporation (HPCL) on Monday said it has secured a long-term contract from ONGC Petro additions (OPaL) for supply of natural gas to their mega petrochemical complex at Dahej.

OPaL, a joint venture of ONGC, GAIL and GSPC, requires the gas to operate its own captive power plant to

support its power and steam requirements.

“HPCL won the contract through competitive bidding against a tender floated by OPaL. HPCL will supply 13.53 Trillion British thermal units of natural gas to OPaL during October 23 to May 26,” the CPSU oil marketing company said in a regulatory filing on BSE.

HPCL is focused on building a strong foothold in petrochemicals, fertilisers and other sectors, it added.

Asian Energy gets ₹782 mn contract from ONGC

Asian Energy Services Ltd has received letter of award worth 782.4 mln rupees from Oil and Natural Gas Corp Ltd for three-dimensional seismic data acquisition services in Gujarat, it said in an exchange filing on Monday. The duration of the contract is 11 months.

Day trading guide

18840 » Nifty 50 Futures

S1	S2	R1	R2	COMMENT
18800	18745	18900	18960	Go long now. Accumulate at 18810 with a stop-loss at 18780

₹1604 » HDFC Bank

S1	S2	R1	R2	COMMENT
1595	1585	1615	1630	Go long only above 1615. Keep the stop-loss at 1610

₹1295 » Infosys

S1	S2	R1	R2	COMMENT
1280	1265	1300	1315	Go long above 1300. Stop-loss can be kept at 1290

₹454 » ITC

S1	S2	R1	R2	COMMENT
452	448	457	460	Go long now and at 453. Keep the stop-loss at 450

₹158 » ONGC

S1	S2	R1	R2	COMMENT
156	154	159	161	Go long above 159. Stop-loss can be kept at 158

₹2551 » Reliance Ind.

S1	S2	R1	R2	COMMENT
2535	2515	2575	2600	Go long now and at 2540. Keep the stop-loss at 2530

₹569 » SBI

S1	S2	R1	R2	COMMENT
566	563	572	576	Wait for dips. Go long at 567 with a stop-loss at 564

₹3210 » TCS

S1	S2	R1	R2	COMMENT
3190	3170	3230	3260	Wait for a rise. Go short at 3225. Keep the stop-loss at 3240

S1, S2: Support 1 & 2; R1, R2: Resistance 1 & 2.

CNG vehicles gear up for a long ride

With regulated prices and its designation as a 'clean fuel', this segment of the transport industry could accelerate

SHINE JACOB
Chennai, 19 June

India's city gas distribution (CGD) infrastructure has seen an investment of ₹1.5 trillion in the last five years. Apart from the supply of piped natural gas (PNG) for domestic and industrial purposes, compressed natural gas (CNG) for transportation forms a significant element of the CGD network. CNG, which is considered one of the cleanest modes of transportation, has been seeing a topsy-turvy ride over the last few years.

The pandemic, price rise triggered by geopolitical tensions such as the Russia-Ukraine War, the subsequent demand dip and the European Union sourcing largely from India's traditional Gulf suppliers are among the key reasons for instability. Though many view CNG as an intermediate fuel ahead of the electric vehicle boom, CNG suppliers, original equipment manufacturers (OEMs) and consumers believe that this is a fuel for the longer run.

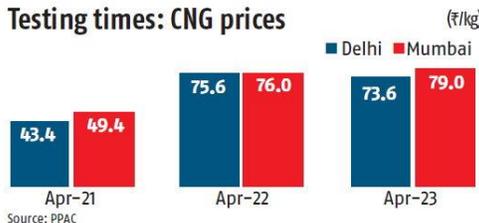
On April 6, the industry seemed to have been given a fresh lease of life. The Cabinet Committee on Economic Affairs cleared a new domestic natural gas pricing plan, setting domestic gas price at 10 per cent of the average price of the India basket crude for the previous month. However, the gas price must stay within a Cabinet-determined band of \$4-6.5 for gas produced by the fields operated by Oil and Natural Gas Corporation and Oil India. The new policy helped in bringing down the CNG prices by up to 10 per cent across cities.

To those who are betting big on this fuel, there are rea-

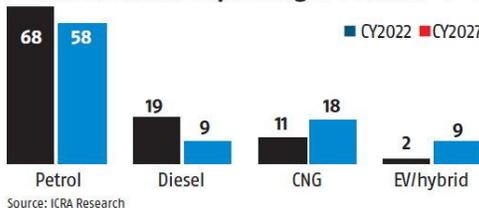


STEPPING ON THE GAS

Testing times: CNG prices



Powertrain mix of passenger vehicles (in %)



sions to cheer. According to a report by CARE Ratings, CNG car sales volume revved up 41 per cent in FY23, despite a 49 per cent rise in prices, indicating that long-distance commuters and taxi drivers still depend on the fuel. According to data in the Vahan portal, CNG-only vehicle registrations saw an

average of 31,050 units per month from January to May 2023, compared to 22,615 units per month during the same period in 2022, representing a 37 per cent increase. "CNG vehicle sales are directly proportional to the pricing of CNG in the market. What is good about this segment is that everybody is now

aware of the benefits of CNG, especially taxi operators. Also talks about diesel vehicles being banned are encouraging buyers to go for any alternative fuel," said Manish Raj Singhania, president, Federation of Automobile Dealers' Associations.

Significantly, the rise in CNG vehicle sales has occurred despite the fact that prices increased by 70 per cent in Delhi based on Petroleum Planning and Analysis Cell data, from ₹43.40 per kg in April 2021 to ₹73.59 per kg in April 2023. At the same time, prices in Mumbai expanded 60 per cent from ₹49.4 per kg to ₹79, touching an all-time high of ₹89.5 per kg in November 2022.

Despite the upbeat outlook, OEMs are still in a defensive mode in terms of creating or expanding CNG offerings. That's because despite the January-May 2023 uptick, FY23 was not a good year for CNG. "The differential between diesel and CNG became too narrow for CNG to be really attractive. So, customers did not come forward to buy CNG vehicles. Recently, there were some policy announcements, which have made CNG a little bit more attractive again. Still the gap is not enough to get back to the levels that we have seen before," said Shenu Agarwal, the new managing director and chief executive officer of Ashok Leyland, addressing its Q4 earnings call.

"Because of the recent changes, some uptick in the CNG demand will happen, but it will not reach the same level at the current prices. Now, CNG prices are going to be announced every month. We have to see how it performs over the next few months. We are ready with its product portfolio," Agarwal added.

Certainly, the second half of the calendar year 2022 was not that attractive for manufacturers. Take the case of Maruti Suzuki India (MSIL). The contribution of CNG powertrains in the order backlog for MSIL declined from 43 per cent in June 2022 to 32 per cent in December 2022. In the passenger car segment, MSIL has 74 per cent market share in the CNG segment with 12

models, followed by Hyundai at 15 per cent and Tata at 11 per cent. According to ICRA analysts, despite a higher upfront cost, lower running costs, aided by a superior mileage significantly lower the total cost of ownership for CNG-powered vehicles.

"Rising gas prices slowed down the adoption of CNG powertrains in H2 CY2022, led by a decline in the running cost differential between petrol and CNG powertrains and a consequent increase in the payback period for the latter. A decline in CNG prices has led to a reduction in the total cost of ownership (10-15 per cent lower than petrol) for the powertrain and is likely to aid adoption for the same going forward," predicted Shamsheer Dewan, senior vice-president and group head, corporate ratings, ICRA, about the government decision in April.

According to ICRA, while the initial purchase cost of CNG is 10 per cent higher than petrol, it provides 50-55 per cent savings on fuel cost after the new pricing policy and 15-20 per cent savings in the total cost of ownership.

ICRA estimates CNG powertrain penetration to increase to around 18 per cent by CY2027, from 11 per cent in CY2022. During the same period, electric vehicles and hybrids are expected to see a rise in share from 2 per cent to 9 per cent. On the other hand, petrol share is expected to decline from 68 per cent now to 58 per cent and diesel from 19 per cent to 9 per cent. This may well be the reason industry veterans like former ONGC Chairman and Managing Director R S Sharma believe that CNG will sustain as a major fuel even in 2050. "It is a long-haul fuel and no intermediate. Since the base load of green energy fuels is low, that may hardly be able to meet the incremental demand," Sharma said.

The government has set a target of 17,700 CNG outlets by 2030, against 5,665 now. Going by the massive investments in the last few years and the expansion plans lined up, it seems the government is also considering it as a long-haul fuel.

RIL resumes vessel ops after Biparjoy

Reliance Industries Limited (RIL), operator of world's biggest refining complex, has resumed vessel operations at the port of Sikka in Jamnagar, Gujarat, industry officials said, as the coastline recovered from the impact of cyclone Biparjoy. "Any vessel calling the Sikka Ports & Terminals Ltd (STPL) can enter the Gulf of Kutch," the officials who received a notice from the company said.

The company had restricted entry of vessels at the port last week "due to unavailability anchorage position."

At least 13-21 tankers were waiting to discharge crude oil at port, an industry source said and ship-tracking data showed on Monday. The company did not immediately respond to request for a comment. Several ports in Gujarat had suspended cargo operations last week due to unsafe weather conditions at sea.

REUTERS

Cash transactions dramatically spike at petrol pumps, online orders

NEW DELHI, JUN 19

ONE of the major benefits of the Centre's decision to withdraw the Rs 2,000 currency note might be the immediate uptick in consumption demand, according to the State Bank of India's Economic Research Department.

"As per our estimate consumption demand may be front-loaded by Rs 55,000 crore. With the bank note remaining a legal tender, unlike demonetisation, consumption could see a boost. Though, RBI asked customers to deposit or exchange the Rs 2,000 notes, but it is expected that high-value amounts could move to high-value spends such as gold/jewellery, high-end consumer durables like AC, mobile phones etc, and real estate," the report said.

Cash transactions have sharply risen at petrol pumps



and cash-paying customers are using Rs 2,000 notes.

The All-India Petroleum Dealers Association (AIPDA) has said that the digital payments, which used to be 40 per cent of daily sales at pumps, have dropped to 10 per cent while cash sales have increased dramatically.

People have also started ordering items online with the cash-on-delivery option. It is

reported that nearly 75 per cent users of online food delivery aggregator Zomato opting for cash-on-delivery have been paying with Rs 2,000 notes.

Ecommerce, food and online grocery segments are likely to witness an increase in customers opting for cash on delivery.

The report expects an increase in donations through Rs 2,000 notes in temples and other religious institutions and sundry

purchases such as consumer durables, boutique furniture, etc.

Around Rs 55,000 crore could be withdrawn by public from Rs 92,000 crore saving bank deposits to be made cumulatively through Rs 2,000 notes. This should give consumption boost along with increasing the velocity of money.

"Considering the MPC of this Rs 55,000 crore at 0.7, we believe that the Private Final Consumption Expenditure (PFCE) might increase by Rs 1.83 lakh crore through the multiplier effect. Considering that ratio of PFCE to GDP at constant prices is around 58 per cent, we may expect Q1 FY24 GDP growth at 8.1 per cent with an upward bias due to the impact of this Rs 2,000 note withdrawal event. This reinforces our projection that FY24 GDP could be higher than 6.5 per cent, per the RBI estimate," the report said. — IANS

Equity indices decline on profit taking at record highs

BHARATH RAJESWARAN
Bengaluru, June 19

BLUE-CHIP NIFTY 50 and Sensex indexes declined on Monday due to profit-taking as they approached their all-time highs, although the broader indexes extended their rally to record levels.

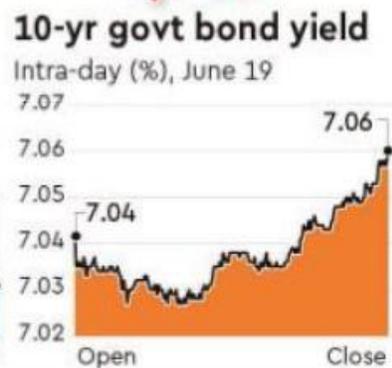
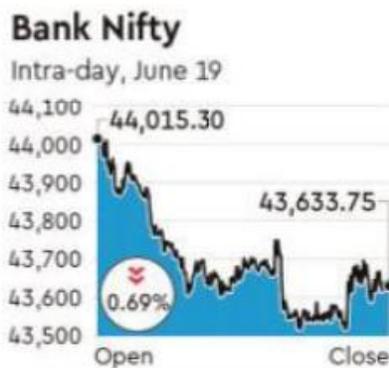
The Nifty index closed 0.37% lower at 18,755.45, while the benchmark S&P BSE Sensex fell 0.34% to 63,168.30. They rose as much as 0.30% earlier, with the Nifty coming within 10 points of its record high of 18,887.60.

"There is nervousness in domestic equities near record high levels due to concerns over high valuations and monsoons," said G Chokkalingam, founder and head of research at Equinomics Research.

"While positive triggers such as slide in inflation, the fall in crude oil prices and strong macroeconomic fundamentals are in place for a sustained rally, monsoon rains could decide the near-term trajectory of the benchmarks."

However, the more domestically focused Nifty midcap 100 index rose as much as 0.72% to a fresh record high and the Nifty smallcap 100 hit an over one-year high. They logged gains of 0.04% and 0.27%, respectively, at the close.

Meanwhile, global equities



were also mostly lower due to caution ahead of China's rate decision on Tuesday and US Federal Reserve chair Jerome Powell's congressional testimony on Wednesday and Thursday.

In India, 10 of the 13 major sectoral indexes declined.

Among individual stocks, Larsen & Toubro rose as much as 2.24% to a new record high after Macquarie

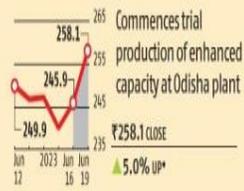
said the company would be a key beneficiary of infrastructure spending in India and West Asia. The stock closed marginally lower.

Among the top losers was Hero MotoCorp, with a 1.75% drop. The two-wheeler maker's shares have fallen for four sessions in a row amid the corporate affairs ministry's probe into the alleged diversion of funds.

—REUTERS

STOCKS
IN THE NEWS

▶ **SOM Distilleries And Breweries**



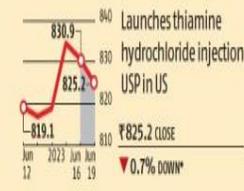
▶ **Skipper**



▶ **Zydus Lifesciences**



▶ **Lupin**



▶ **Hindustan Petroleum**



*OVER PREVIOUS CLOSE

● INVESTMENT AMOUNT IS DOUBLE OF THAT IN FY23

Tata Power earmarks capex of ₹12,000 cr for this fiscal

Plans to take part in privatisation of discoms

RAJESH KURUP
Mumbai, June 19

TATA POWER HAS earmarked a capex of about ₹12,000 crore for FY24, double of that in FY23, even as the company is mulling of taking part in privatisation of distribution companies (discoms).

The doubling of capex is to meet the company's growth plans, Tata Power chairman N Chandrasekaran said at the company's AGM held virtually on Monday.

"This includes the investment in the upcoming 4 GW manufacturing plant, under-construction renewable projects, transmission and distribution businesses in Odisha, Delhi and Mumbai and new opportunities. The 4 GW cell and module manufacturing plant in Tamil Nadu is well on track, and we expect the module line to be ready by October this year and the cell line by the end of the year," Chandrasekaran added.

The Tata group company plans to fund these projects largely through internal accruals and cash on books, he added.

Given its "successful" track record in turning around discoms, Tata Power would also look to participate in privatisation opportunities as and when the policy reforms are undertaken.

Talking about renewables, Chandrasekaran said that renewables will continue to be the key focus in the coming years and Tata

GROWTH PLAN

Investment in the upcoming **4 GW** manufacturing plant, under-construction renewable projects, among others

- The company plans to fund these projects largely through internal accruals and cash on books
- Renewables to continue to be the key focus in the coming years
- Tata Power 'well positioned' to take advantage of the growth opportunities in renewables sector

14.1 GW

The company's total installed power generation capacity across the categories has risen to about

3.9 GW
total operational renewable capacity



Power is "well positioned" to take advantage of the growth opportunities in this sector.

The company's total installed power generation capacity across the categories has risen to about 14.1 GW. In line with its renewable focus, the company has added about 500 MW capacity taking the total operational renewable capacity to 3.9 GW. With completion of under construction projects of 2.7 GW, the clean and green source-based capacity will be close to 50% of its total installed capacity.

In the solar rooftop segment, the company has built an extensive channel network of 450 dealers across 275 districts. In the fourth

quarter of FY23, solar rooftop, along with the captive solar engineering, procurement and construction (EPC) projects crossed ₹1,000 crore revenue, doubling from the previous year.

Tata Power is also a leader in the electric vehicle charging market with presence in more than 550 cities and towns in the country and 127,000 registered users. The company installed about 4,000 public and captive chargers and sold close to 40,000 home chargers, he added.

Talking of 'Aalingana', Tata group's project for a greener and cleaner planet, Chandrasekaran said as part of this vision, Tata Power plans to become an ESG

benchmark in the power sector. The firm has its key goals outlined — becoming carbon net zero by 2045, becoming 100% water neutral by 2030 and no net impact on biodiversity before 2030 and becoming an organisation with zero waste to landfill before 2030.

For the fourth-quarter ended March, Tata Power posted a 48.58% rise in consolidated net profit of ₹939 crore, beating Street estimates, led by growth across all its business verticals. During the quarter, the company's revenues rose 5.54% to ₹12,755 crore from ₹12,085 crore a year ago, while Ebitda rose 37.64% to ₹3,101 crore from ₹2,253 crore.

Vedanta lays out \$1.7-bn capex plan for FY24

RAJESH KURUP
Mumbai, June 13

OPTIMISTIC OF AN “exciting journey” ahead, mining major Vedanta, a subsidiary of London-headquartered Vedanta Resources (VRL), has committed to invest \$1.7 billion for capital expenditure in FY24.

“We have already invested \$1.2 billion in the form of growth capex in FY23 to augment our assets and production. We envisage committing another \$1.7 billion in FY24 towards growth projects,” its chairman Anil Agarwal said in the company’s annual report for FY23.

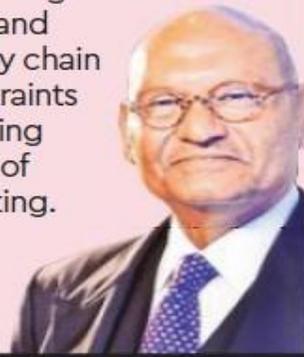
“Vedanta is already expanding its aluminium and zinc capacities. Our oil and gas operations, which account for nearly one-quarter of India’s production, is also diversifying its reserves and resources portfolio towards a vision of contributing 50% to India’s total oil and gas production,” he said, adding, the firm is “envisaging” a greater role in the nation’s growth story and in making India self-reliant for minerals and energy.

Agarwal, in his message to shareholders, said times ahead are “exciting” and the company is optimistic of an exciting journey. “The macro-economic factors and risks faced by advanced economies going into recession may pose potential challenges to metal demand. Yet, the overall sentiment towards mined commodities is improving as the pace of energy transition accelerates across the globe. Some green shoots are already visible with inflationary pressures beginning to ease and supply chain constraints showing signs of relenting.”

Agarwal added: “These will help

ANIL AGARWAL,
VEDANTA CHAIRMAN

Some green shoots are already visible with inflationary pressures beginning to ease and supply chain constraints showing signs of relenting.



to improve profitability and generate robust cash flows.”

Talking about FY23, Agarwal said that VRL, the holding company of Vedanta, has deleveraged \$2 billion during the year against its commitment of \$4 billion deleveraging over three years. “We have an impeccable track record of honouring all capital market commitments”.

On Vedanta’s FY23 performance, Agarwal said the company operated against a difficult and uncertain macro-environment driven by prolonged geo-political conflict, subsequent energy crisis and aggressive monetary policies adopted by central banks. Despite this, it posted ₹1.45 trillion in revenues, he added.

Vedanta’s MD & CEO Sunil Duggal said that the company’s long-term focus is to grow in India, in sync with the country’s “robust” economic and demand growth.

Envision bags 350-MW Serentica wind project

RENEWABLE ENERGY SOLUTIONS provider Envision Energy on Monday said it has bagged a 350-MW wind energy project from Serentica Renewables. PTI

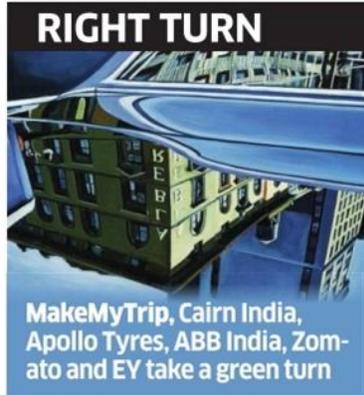
India Inc Ropes in EV Cab Cos to Offer Green Rides to Staffers

Prachi.Verma@timesgroup.com

New Delhi: India Inc is taking its 'go green' initiatives to the next level by roping in EV cab services companies like BluSmart, Evera, GoGreen Cabs, and eee-Taxi to provide official and sometimes personal commute to employees free of cost or at discounted rates.

Companies including MakeMyTrip, Cairn India, Apollo Tyres, ABB India, Zomato, and EY are doing this to reduce their carbon footprints, their officials told ET.

Zomato and Apollo Tyres said they have tied up with BluSmart to offer electric vehicle cab services to their employees in different cities. "Our employees, whether they book EV cabs on their own for personal or official use, or it is booked by the organisation, get a certain discount for using the EV cab services," said Dipankar Ghosh, Apollo Tyres' group head, HR, for Asia Paci-



RICHARD ESTES, Car Reflections

fic, Middle East and Africa.

Raman Kumar Singh, chief human resources officer of ABB India, said some of the firm's offices have tied up with vendors who provide a green fleet for official commutes.

For instance, ABB India in Nashik has a tieup with GoGreen wherein the employees can choose to book an EV cab for official purposes, he told ET.

"In our Faridabad office, similarly, an EV cab is stationed for ad hoc travel requests. More and more of our offices are now exploring such options encouraging the suppliers to have an electric fleet," Singh said.

Cairn Oil & Gas of Vedanta Group is also offering discounts to its employees and their families to avail EV cab service. "We are driven by our ESG purpose towards transforming the planet, communities and workplace that culminates in us achieving net zero carbon by 2050," said Madhu Srivastava, CHRO of Vedanta.

EY in India is providing electric cabs for local commuting to its employees either at no cost or at discounted rates through partnerships with few of the top zero emission transport services, its spokesperson said in an emailed response.

EV ride-hailing and cab services companies are ramping up their fleets significantly to meet increasing demand from companies.

Govt plans to sell 0.15% stake in Coal India to employees via OFS

Govt to sell 92 lakh shares at ₹226.10 apiece; OFS to open on June 21

PTI / New Delhi

The government will sell up to 92.44 lakh shares or 0.15 per cent stake in Coal India to its employees at a price of Rs 226.10 a share.

"The employee OFS (Offer for Sale) shall remain open from June 21, 2023 to June 23, 2023," Coal India said in a stock exchange filing.

Under the share sale offer, 92,44,092 equity shares (representing 0.15 per cent of the total paid up equity share capital of the company) would be offered to eligible CIL employees at a price of Rs 226.10 per equity



share.

The share sale would fetch around Rs 20,000 crore to the government.

Shares of Coal India settled at Rs 227.30 apiece, down 0.48 per cent over the previous close on the BSE.

The employee OFS follows

the secondary market share sale in Coal India by the government earlier this month.

The government had mopped up Rs 4,185 crore through 3 per cent stake sale to institutional and retail investors in state-owned Coal India at a floor price of Rs 225 apiece.

The holding of the government has come down to 63.13 per cent in the coal producer after the OFS.

So far in current fiscal year, the government has mopped up Rs 4,235 crore from PSU stake sale. The full year target from disinvestment has been pegged at Rs 51,000 crore.

No cuts, no. of central PSU jobs same since 2013: BJP

Lashes Out At Rahul For His 'Devious Agenda'

TIMES NEWS NETWORK

New Delhi: The BJP on Monday lashed out at Rahul Gandhi for his "devious agenda" on public sector jobs. It argued that the overall manpower in central PSUs had remained virtually unchanged since 2013, despite the privatisation of Air India and staff rationalisation at companies such as BSNL and MTNL, with the latest numbers expected to show an addition to

the workforce due to the special recruitment drive by the Modi government.

"In 2013, the total number employed with PSEs stood at 20.3 lakh. The same number as in 2022 was 19.8 lakh, despite rationalisation in BSNL/MTNL and Air India's disinvestment. As part of Mission Recruitment, CPSEs have added over 20,000 new jobs since June last year," BJP IT cell head Amit Malviya said in a series of tweets.

Achieving Net Zero by 2070



**RAMEESH KAILASAM
& KEERTHI LAL KALA**

Respectively, CEO Indiatech.org, and founder, Idasu Labs (I.La) Pvt Ltd

Can India, with its already stretched national balance sheet, come up with the multibillion-dollar programmes needed? If business is to play a meaningful role, we need to have a holistic strategy on Nationally Determined Contributions

A recent tweet by Nikki Haley, a US Republican presidential candidate, calling India and China as major polluters created a huge furore on the internet. Let us also look at some facts. As of 2019, per World Bank, India's per capita carbon emission was 1.78 MT (metric tons), where as that of China and the US stood at 7.61 MT and 14.67 MT, respectively.

The debate on historical responsibility for polluting the earth as opposed to potential pollution owing to the developmental needs of emerging economies is the mainstay of the COP deliberations. While these debates continue, the developed world is moving to ensure their future carbon footprint does not reduce their gravitas in geopolitics.

The European Green Deal (2020) has set a legally enforceable mandate to achieve net-zero by 2050 and has prompted multiple policy actions. This deal spells out strategic priorities for EU nations and recommendations for actions across all sectors. Further, the EU Carbon Border Adjustment Mechanism (border tax) seeks to levy a tariff on carbon-intensive products being imported into the EU. Germany has launched a €50 billion Industrial Decarbonisation Subsidy program on its own.

The US Inflation Reduction Act (2022) sets a hefty target of \$400 billion of public spending in renewable energy and carbon footprint reduction in various sectors by 2035. The Act not only promotes technological R&D to maintain the US' leadership in the space, but incentivises corporates and general consumers alike to reduce their carbon footprint.

Closer home in India, incentives in the form of Perform, Achieve and Trade (PAT) for energy saving (industrial) started rolling out in 2012. The LIFE Mission (2022) announced by the prime minister is a clarion call for everyone to act responsibly towards the environment. We have otherwise in the past often depended on a mandating/penalising approach to curbing environmental pollution, mirroring global precedents, under the Environment Protection Act (1986), various Waste Management Rules (2016) and Pollution Control Norms. Sebi has also mandated Business Responsibility and Sustainability Reporting (BRSR) for the top 1,000 listed companies from FY23.

The financial world, in the meanwhile, has a new buzzword—ESG, or environment, social and governance. Tying into the UN SDGs, investors globally are increasingly trying to bring ESG credibility into their portfolios. In the near future, all cross-border investments, whether private or developmental, would probably use an ESG lens for scrutiny. Global ESG fund assets reached \$2.5 trillion in 2022 by some estimates.

Can India, with its already stretched national balance sheet, create multibillion-dollar programmes to push for its own 2070 net-zero target? While the need for such a commitment can't be set aside, we also need a holistic strategy to achieve our Nationally Determined Contributions

(NDCs) and targets, with limited resources.

Leveraging our academic strengths, a push for R&D for environmentally-friendly industrial manufacturing processes, better machine design, new material research, and recycling and retrieval technology could pay huge dividends. It will not only increase self-reliance in technology, but can potentially open big global south markets for Indian technology. A complementing focus on skill development and education will further lead to quicker industry adoption.

Budget 2023 announced the creation of a domestic carbon credit market. While this is a laudable development, to avoid the pitfalls of greenwashing, there is a need to define transparent, verifiable, and foolproof mechanism for real carbon footprint reporting. A digital-only approach needs to be developed and standardised to reduce concerns of misreporting. This can make us a global leader, like UPI has in digital payments, and can make cross-border authentication of carbon data easier as well.

Another neglected element of carbon calculations is India-specific emission factors for various sectors concerning input and output materials. The Central Electricity Authority, for example, publishes updates on emission factors to be used for electricity around the country. Similar, localised national-level data should be developed to ensure the aggregate carbon

footprint of the country doesn't get misrepresented at the global stage.

We have seen excellent success in rolling out time-bound and phased policy in various forms. Vehicular pollution norms Bharat Stage I-VI and the Phase Manufacturing Program for mobile components are excellent examples. Creating similar roadmaps for 'greenification' of products and services with adequate scientific rigor for threshold setting will kickstart action on various fronts. Business owners and investors can plan better. Policy incentives and controls can be structured to be in tandem and R&D will gain more focus.

A great first step was taken in approving the Sovereign Green Bonds Framework (2022). Expanding the remit to other financial instruments, not just funding large-scale public infrastructure projects, but to provide low interest loans to SMEs for green transition will ease the heartache of many a business owner.

The customer is the king, but the customer of today is also easily being misled by fake claims. The price-sensitive Indian customer, however, is slowly gravitating towards reduced life-time cost offerings, as is visible in auto and consumer white-goods. To address this concern, appropriate standardisation of qualitative and quantitative measures of the planet-positivity of a product have to be developed and their declaration mandated.

All of the above horizontal interventions can seed the ecosystem for climate-friendly growth for India that can help us progress qualitatively with minimal stress on the country's finances.

A neglected element of carbon calculations is India-specific emission factors for various sectors concerning input and output materials

India and Vietnam decide to amplify defence, security ties

Our Bureau
New Delhi

Defence Minister Rajnath Singh and his Vietnamese counterpart General Phan Van Giang on Monday agreed to enhance industry co-operation, and maritime security, given China's dominance in the South China Sea and the Indo-Pacific region.

Progress on various bilateral defence co-operation initiatives was reviewed during the meeting, with both sides expressing satisfaction at the ongoing engagements, the Ministry of Defence stated. "Both Ministers identified means to enhance existing areas of collaboration, especially in the field of defence industry co-operation, maritime security and multinational co-operation," stated the Ministry.

INS KIRPAN

Sources said that Vietnam has shown interest in BrahMos supersonic cruise missile to augment its air defence systems and the talks are in early stages. Vietnam is an important part-



STRENGTHENING RELATIONS. Defence Minister Rajnath Singh with his Vietnamese counterpart, General Phan Van Giang

ner in India's Act East Policy and the Indo-Pacific region, said the Ministry.

Rajnath Singh also announced the gifting of the indigenously-built in-service missile corvette *INS Kirpan* which, the Ministry pointed out, will be a milestone in enhancing the capabilities of Vietnam People's Navy. The 1,350-tonne corvette is built by Kolkata-based PSU Garden Reach Shipbuilders & Engineers (GRSE) and armed with missiles which will empower the country to secure its maritime interests much more con-

fidently. During his 2022 visit to Hanoi, Defence Minister Singh had handed over 12 high-speed guard boats to Vietnam, built under a \$100-million Line of Credit granted to it by India.

The Defence Minister of Vietnam also visited Defence Research and Development Organisation headquarters and discussed ways to enhance defence industrial capabilities by co-operation in defence research and joint production.

General Phan Van Giang, paid homage to the fallen heroes at the National War Memorial.

SBI to incentivize green home loan takers

Shayan Ghosh
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MUMBAI

State Bank of India (SBI) is looking to reintroduce a scheme that will encourage borrowers to buy units in green housing projects, offering them a 10-25 basis points (bps) discount on the prevailing interest rates, a person aware of the development said.

SBI had earlier implemented a similar home loan scheme, but discontinued it in 2018, the person said seeking anonymity.

In 2009-10, the state-owned lender launched the 'SBI Green Home' initiative to encourage developers build environment-friendly residential projects, as per the disclosures in its annual report for the financial year.

The proposed plan is to evaluate environmental, social, and corporate governance, or ESG-compliant builders, and offer them and homebuyers cheaper loans, he added.

The discount for retail customers will be on the spread the bank charges over and above its external benchmark-based lending rate, currently at 9.15%.



SBI's plan to reintroduce a green home loan product emphasizes the increasing demand for sustainable housing projects. **MINT**

"The bank will look at rating offered by Indian Green Building Council (IGBC) for this product. Builders following environment-friendly practices will benefit from this concession along with buyers looking for green homes," said the person cited above.

The IGBC's new green building rating system considers several features like sustainable architecture and design, water conservation and energy efficiency, building materials and resources. According to IGBC, green projects could help save 20-30% electricity and 30-50% water.

In February, SBI concluded a syndicated social loan worth \$1 billion, comprising \$500 million in base amount and green shoe option of another \$500 million, positioning it as a leading a commercial bank in Asia Pacific to secure the largest ESG loan. SBI's plan to reintroduce a green home loan product emphasizes the increasing demand for sustainable housing development.

To be sure, SBI is not alone in urging consumers to embracing green buildings. Mortgage lender Housing Development Finance Corp (HDFC) raised a loan of \$400 million from IFC

(International Finance Corp) in December 2022. Similarly IIFL Home Finance signed a loan agreement of \$68 million with Asian Development Bank (ADB) in February 2022. "The objective is to incentivize customers who differentiate between an environmentally compliant project and non-compliant builders," said the person cited above.

Industry associations too are advocating green home loans. In April, the Confederation of Real Estate Developers Association of India (Credai) entered into a partnership with IGBC, wherein Credai will build over 1,000 certified green projects over two years, and 4,000 projects by 2030. This, Credai said in a statement, will contribute over 400,000 additional housing units in the green development category.

Following sustained demand for housing units, after a slight dip earlier this year, mortgages have been one of most lucrative products for Indian banks. Customers had adopted a cautious wait-and-watch approach, but the optimism seems to have returned, said bankers.

SIP closures jump 7.4% to 14.19 lakh in May, says data

Number of new SIP registrations rise to 24.7 lakh last month from 19.56 lakh in April, data with AMFI shows

OUR CORRESPONDENT

NEW DELHI: The number of systematic investment plan (SIP) accounts being discontinued rose 7.4 per cent month-on-month to 14.19 lakh in May, despite the stellar inflow into mutual funds through the route.

At the same time, the number of new SIP registration rose to 24.7 lakh last month from 19.56 lakh in April, implying fresh registration of over 5 lakh, data with the Association of Mutual Funds in India (AMFI) showed.

The higher number of SIP registration than discontinuation shows investors' continued confidence in the route, DP Singh, Deputy MD and CBO at SBI Mutual Fund, said.

This could also be due to an easy cancellation facility available through online modes, he added.

Meanwhile, investors continued to park their money in mutual funds, with contributions in SIPs reaching a new high of Rs 14,749 crore last month, after a brief dip to Rs 13,728 crore in April. It was Rs 14,276 crore in March.

This robust inflow has led to assets under management of



Meanwhile, investors continued to park their money in mutual funds, with contributions in SIPs reaching a new high of Rs 14,749 crore last month, after a brief dip to Rs 13,728 crore in April. It was Rs 14,276 crore in March

SIP rising by five per cent to Rs 7.53 lakh crore last month from Rs 7.17 lakh crore in April.

The surge in SIP inflows amid higher cancellations shows that new investors continue to invest more money than the average ticket size.

Going by the data, the number of SIP accounts discontinued or matured rose from 13.21 lakh in April to 14.19 lakh in May.

Overall, 1.43 crore SIPs were discontinued or matured in 2022-23, which was higher than 1.11 crore SIPs in 2021-22. Although, the number of SIP registration was higher during these periods too.

Further, assets under management of equity mutual funds shot up 4.5 per cent month-on-month to Rs 16.56 lakh crore in May, fuelled by a surge in market indices and a spike in equity

scheme sales.

The industry saw an increase in equity scheme sales month-on-month (MoM) by 21 per cent to Rs 34,100 crore.

At the same time, redemptions climbed nearly 37 per cent MoM to Rs 31,100 crore, consequently, net inflows dropped to a low of Rs 3,240 crore in May. This was also the second consecutive month of decline in inflows.

Going by the data, the asset base of equity mutual funds, including equity-linked saving schemes (ELSS) rose to Rs 16.56 lakh crore in May from Rs 15.84 lakh crore in April.

This was supported by a gain in NSE's benchmark index Nifty by 2.6 per cent to 18,534 in May. So far this year, the Nifty climbed by 3.4 per cent.

In terms of sector, mutual funds showed an interest in NBFCs (non-banking finance companies), technology, automobiles, consumer, retail, and insurance leading to an MoM rise in their weights, according to a report by Motilal Oswal Financial Services.

Conversely, private banks, PSU banks, utilities, oil and gas, metals, and media saw an MoM moderation in weights, it added.

Rupee declines 3 paise to 81.93 against US dollar

MUMBAI, June 19 (PTI)

THE rupee depreciated by 3 paise to close at 81.93 against the US dollar on Monday amid strong American currency against major rivals overseas. However, the inflow of foreign funds into local equities and a downward trend in crude price capped the fall in the domestic unit, forex traders said. At the inter-bank foreign exchange, the domestic unit opened lower at 81.93 and moved in the range of 82.01 to 81.90 during intra-day.

The unit settled at 81.93 (provisional) against the US dollar, reflecting a loss of 3 paise over the previous close. On Friday, the rupee settled at 81.90 against the dollar. Meanwhile, the dollar index, which gauges the greenback's strength against a basket of six currencies, was up 0.29 per cent at 102.54.

Crude oil prices were trading lower, with the benchmark Brent crude slipping 0.16 per cent to USD 76.49 per barrel.

वीडियोकोनની ઓઈલ વેન્ચર્સની અસ્કયામતો ખરીદવા માટે BPCLની સક્રિય વિચારણા

અમદાવાદ, તા. ૧૯
વીડિયોકોન ઓઈલ વેન્ચર્સની
નાદારીની કાર્યવાહીએ નવો વળાંક લીધો
છે. સરકારી માલિકીની ભારત
પેટ્રોલિયમ કોર્પોરેશન વીડિયોકોન
ઓઈલ વેન્ચર્સની બ્રાઝિલની અસ્કયામતો
ખરીદવા માટે રાઈટ ઓફ ફર્સ્ટ રિફ્યુઝલ
પર વિચાર કરી રહી છે.
બીપીસીએલ અને વીડિયોકોન
ઓઈલ વેન્ચર્સે સંયુક્ત સાહસ ભાગીદારો

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ઓફર મળી હતી.

41% of miners feel won't survive 10 years: Survey

'Need to step up capex on critical minerals, global alliances'

MANISH GUPTA
New Delhi, June 19

FORTY-ONE PERCENT of the mining CEOs polled in the PwC's 26th Annual Global CEO Survey don't think their companies will be economically viable in 10 years if they continue on their current path. "Miners can no longer depend on yesterday's portfolios and practices to create value in this newly dynamic and fiercely competitive landscape," PwC said in its report— Mine 2023: The era of reinvention.

Given ongoing geopolitical uncertainty, the rapid shift to clean-energy technologies and the importance of these to national security and economic stability, governments around the world have taken swift action to secure critical mineral supply. These minerals play an important role in clean energy transition technologies, such as batteries, electric vehicles, solar and wind generation, and also in national defence, technologies and weaponry.

Consumption of critical minerals has increased due to shift to renewable power sources and electric vehicles. This demand for critical minerals like lithium, cobalt, nickel, vanadium and rare earths for clean energy will increase further.

"Given India's limited reserves of critical minerals, in order to achieve the vision of 'Atmanirbhar Bharat', we will need to increase spend on exploration for critical minerals, secure global alliances with mineral-rich countries through both government intervention and private investments, attract the best of global technology in the industry, digitize mining and explo-



35% said they will be highly exposed to climate risks in next five years

TOP 40 miners to see 9% fall in revenue, and 20% fall in coal revenue in 2023

\$450 bn green bonds issued in 2022

73% see local skills gap as biggest barrier to adopting new technology

rations activities and develop future ready workforce," said Yogesh Daruka, partner – power and utilities, mining, PwC India.

As governments consider their future needs for critical minerals, they may establish strategic stocks of these resources, like petroleum and uranium reserves, as evidenced by government-backed procurement activity in the EU and India.

Among the noteworthy deals on critical minerals, Australia and India established partnership to strengthen cooperation in the development of critical minerals assets and supply chains in June 2022. The Indian mines ministry established a joint-venture company, Khanij Bidesh India Ltd (KABIL), to ensure the supply of critical minerals for its domestic economy.

KABIL has been actively seeking offtake agreements and has already signed with Argentina and Australia to procure select critical minerals.

Saarloha, an Indian steel

producer, used hydrogen-powered steelmaking technique to produce India's first commercial low-carbon steel in December 2022, achieving 80% lower emissions from the refining process than traditional methods.

Miners will have to ramp up production to meet rising demand for the critical minerals and other commodities. Critical minerals dominated deal activity in 2022 as miners raced to capitalise on the global transition towards clean energy. "Mining is playing a fundamental role in underpinning the global transition to clean energy, but the path ahead is rocky. A net zero world requires more mined critical minerals, not less, and the flow of industry dealmaking clearly reflects this.

"But the increasing rise of geopolitics as an influencing factor in global mining may complicate operations in an increasingly complex world with new actors," said Paul Bendall, global mining leader, mining and metals, PwC Australia.

Government has emerged as an important new player in the critical minerals market after rapid demand growth and risky levels of supply chain concentration. They have formed alliances, instituted new policies and mobilised funding to secure access.

PwC report says that these moves will change the mining business. The inflow of public funds means that miners must rethink the rates of return. Investment risk and competition will rise as governments alter the playing field with incentives and interventions.

Mining leaders know the pressure that climate change can create as many of the mining operations are in hot, dry, remote environments.

About 35% of mining CEOs said their companies are highly exposed to climate risks arising in next five years.

BJP: Central PSU job numbers virtually at same levels since '13

Slams 'Devious Agenda' Of Rahul Gandhi

TIMES NEWS NETWORK

New Delhi: BJP on Monday lashed out at Rahul Gandhi for his "devious agenda" on public sector jobs.

It argued that the overall manpower in central PSUs had remained virtually unchanged since 2013, despite the privatisation of Air India and staff rationalisation at companies such as BSNL and MTNL, with the latest numbers expected to show an addition to the workforce due to the special recruitment drive launched by the Modi government.

"In 2013, the total number employed with PSEs stood at 20.3 lakh. The same number as in 2022 was 19.8 lakh, despite rationalisation in BSNL/MTNL and Air India's disinvestment. Additionally, as part of Mission Recruitment, CPSEs have added over 20,000 new jobs since June last year, which will reflect in this year's tally," BJP IT cell head Amit Malviya said in a series of tweets, while accusing the Congress of mutilating data.

He said the Congress party should "stop shedding



Despite Air India's privatisation and staff rationalisation at units like BSNL and MTNL, the total number employed with PSEs stood at 19.8 lakh in 2022. In 2013, the number was 20.3 lakh, BJP said

crocodile tears" over the state of PSUs as several companies had seen an increase in manpower between 2013 and 2022.

"Like Indian Oil Corporation (increase of 79,828), Mahanadi Coalfields (36,418 additions), Nuclear Power Corporation (22,235 new employees), Northern Coalfields (incremental 17,674 jobs) and HPCL Rajasthan Refinery has added 16,422 new head count, among others," he said.

Gandhi had tweeted that the jobs in PSUs had reduced from 16.9 lakh in 2014 to 14.6 lakh in 2022. He mentioned the reduced number of employment in BSNL, SAIL, MTNL, SECL, FCI and ONGC. He also said the number of contractual employees had doubled, raising questions on whether the rise in contractual employees is a medium to "snatch" the constitutional rights of reservation.

Malviya tweeted, "Poorly

conceived policies of Congress have brought down countless PSUs and sunk taxpayer's money, which could have been used for health and education. Due to massive corruption and foolish policies, Air India and BSNL were decimated under the UPA govt. While PSUs have been given far greater freedom under the Modi government."

He said that the profit of CPSEs had soared 93% from around Rs 1.3 lakh crore in 2013-14 to around Rs 2.5 lakh crore in 2021-22.

Malviya also said that Gandhi should stick to doing "choreographed interviews, which can be edited later, to remove bloopers and make you look reasonable". He said, "You ran a vicious campaign against HAL, SBI, and LIC too, eventually to look stupid, when each of these PSUs posted super profits."

He said contribution of all CPSEs to central exchequer

by way of excise duty, custom duty, GST, corporate tax, interest on central government loans, dividend, and other duties and taxes stood around Rs 5.1 lakh crore in FY 2021-22 as against Rs 2.2 lakh crore in FY 2013-14, a jump of 130%. Malviya also said how the net worth of all CPSEs has increased from Rs 9.5 lakh crore as in 2014 to Rs 15.6 lakh crore as in March 2022, registering a growth of 65%.

"Truth is that Modi Govt has reformed PSUs and they are doing much better than they ever did under the Congress," Malviya tweeted.

GUEST VIEW

Manage supply chain risks well for a competitive edge

JAIDEEP MEHTA & MINNA DHIR



are, respectively, an investor and a tech industry watcher, and managing director at Taffles Exports.

The tragic meltdown at Japan's Fukushima nuclear-power plant in 2011 had an unexpected but dire impact on car factories all over the world. Near the plant was the only factory in the world that made Xirallic paint pigment, a magical material that gives our cars a unique glint; it shut down. Subsequently, production in many car plants around the world ground to halt as the brutal reality of third-party and supply chain risks hit home. About a decade later, China's policies to combat covid triggered a significant migration of supply chains from there to Vietnam, Bangladesh, India and other countries. This diversification process paradoxically creates new risks as global companies seek out new and untested supply centres and partners. Supply chain risk is a modern-day reality and can emanate from a variety of sources, ranging from natural disasters to government policies and a host of other unforeseen events.

CDP, a global non-profit organization that runs one of the world's leading envi-

ronmental disclosure platforms, reported that companies face up to \$120 billion in costs from environmental risks in their supply chains between 2021 and 2026.

I recently met a senior leader at a major retailer in West Asia who said he was having sleepless nights since many of his key garment suppliers were based in Sri Lanka, a country rocked in recent times by political instability marked by widespread rioting and protests. He wondered if there was an efficient way to monitor the on-the-ground situation there.

In an era of climate change, political upheavals and simultaneous pressure to adhere to Environmental, Social and Governance (ESG) norms and United Nations Sustainable Development goals, this risk coverage needs to include several dimensions in order to be effective. To begin with, companies are investing heavily to monitor key nodes of their value chains. Asian Paints' Board Risk Management Committee, for example, monitors "material availability and inflation" risk as part of its core mandate. Documented processes are triggered in the event of a disruption, so as to ensure that production is not impacted and business revenue is protected. ESG and UNSDG goal monitoring has rapidly moved

from a box-ticking exercise to a genuine effort within many organizations that are keen to do "good" business.

But how does a company track what its supply chain partners are implementing? Whilst much of the measurement is through internally generated data, certain external content can be leveraged too: a leading retailer from the UK engaged an outsourcing firm to study transport facilities around the factories of its key suppliers in a few countries. This retailer recognized that these facilities constitute important social infrastructure, especially for the safety of their women workers. The output of the study is expected to feed decisions around how much business to do with which supplier, and indeed if there is a case to co-invest with any supplier to strengthen transport facilities for factory workers.

It is important to remember that risk management has to be part of the relationship design, not an afterthought. Progress-

sive companies have well established processes that include:

One, screening all new partners to ensure they are not on any law enforcement watch-lists or have not been sanctioned by any government or the UN. Artificial Intelligence models are playing an increasingly important role in this screening process and will probably be automated entirely in 18 to 24 months.

Two, should the initial screening process throw up any red flags, companies look towards specialist risk consultancies such as Integrity Risk International or Aperio Intelligence to do a deeper dive as part of a diligence exercise, so that an informed 'go' or 'no go' decision can be taken with respect to doing business with the particular partner.

Three, once a partner is onboarded and initial diligence and compliance exercises are completed, it is advisable to switch on a monitoring process to stay ahead of any emerging risks. These monitoring systems cover at least geo-political risks, environ-

mental risks, key person risks, catastrophe related risks (such as floods) and, of course, financial risks.

There are several risks that can and should be managed appropriately and continuously by companies. Monitoring the ecosystem around a remotely located factory, or the news around a politically connected supplier is relatively easy to do, thanks to the data and content platforms of companies such as Dow Jones' Factiva or RZolot's ContentStream.

It is widely estimated that approximately 80-90% of an automobile's value comes from the assembly system's supply chain, given high levels of outsourcing. Maruti Suzuki, thus, would be sourcing almost 70,000 crore worth of products from third parties; this includes various components such as transmission systems, power-trains, electrical systems and several parts that are sourced globally. In addition, the supply chain is multi-tiered. Even if a Tier 3 supplier gets disrupted, such as the Xirallic pigment company in Japan, the entire industry can grind to a halt. Managed badly, supply-chain disruptions can strike a lethal blow to the organization. Managed well, however, it can become an important source of competitive advantage.

What has been a significant worry in recent years could also help well managed firms outdo rivals

THEIR VIEW

The time for an honest and open dialogue on climate is right now

Net zero is the means to an end and we mustn't confuse it with the overarching goal of enhancing the quality of human lives



V. ANANTHA NAGESWARAN & BJORN LOMBERG

are, respectively, chief economic advisor to the Government of India, and president of the Copenhagen Consensus and author of 'Best Things First'.

While the challenge of climate change is incredibly complex, the climate conversation is often restricted to an overly simplistic scope, with a limited number of acceptable perspectives. The 'acceptable' worldview can be reduced to this: Climate change is an existential threat, our most important problem, and we can fix it cheaply with solar and wind energy.

This restricted discourse fails to capture the complexity of the climate challenge and hinders progress in addressing its multifaceted challenges. Climate change is a significant concern, but it is also important to consider the costs and feasibility of proposed solutions, weighing both the costs of climate change and costs of climate policy.

The truth is that there are many important problems. Climate is one of them. We must infuse the climate debate with honesty and transparency to make better decisions. It would be useful to avoid using fear as a motivator and instead inspire people through positive examples. Scare-mongering relies on an overstatement of the situation. The United Nations expects the average person to be 450% as rich in 2100 as today. Following current temperature projections, global warming would knock that down to people being 434% as rich. That is a problem, but it is not the end of the world.

Population dynamics, age distribution, income levels, technological advancements, relative prices, lifestyle changes, regulation and governance all play a more significant role in shaping the supply and demand of economic goods and services compared to the impact of climate change. Even the most significant UN scientific panel report of the last decade said, "For most economic sectors, the impact of climate change will be small relative to the impacts of other drivers." This does not mean we should not care about climate change; it suggests a need to maintain perspective.

Countries must take ownership of the climate problem; they cannot be coerced into action. Many believe solar and wind power alone can solve our energy challenges. While renewable energy sources such as solar and wind can contribute to reducing greenhouse gas emissions, assessing their limitations and potential drawbacks is crucial. Their effectiveness varies depending on geographical factors and available resources.

These sources often require substantial upfront investments, and their intermittent nature raises concerns about grid reliability and energy storage. Additionally, transitioning entirely to solar and wind power is not only an enormous engineering challenge that nobody has achieved yet, but it may also pose unprecedented challenges for industries heavily reliant on fossil fuels, potentially leading to



job losses and economic and social disruptions. There is also unintended but significant environmental damage from the mining and processing of critical minerals and rare earths. Communities, their livelihoods and centuries of tradition and culture could be destroyed in the process. So, what are we achieving in the end?

The cost of implementing renewable energy infrastructure and the potential impact on energy prices should be carefully evaluated, especially for low-income households and industries sensitive to energy costs. Balancing climate goals with economic growth and energy affordability is crucial to avoid undue burdens on individuals and businesses.

Furthermore, it is important to approach climate change solutions focusing on innovation and technological advancements. Relying solely on government regulations and subsidies may limit the potential for market-driven solutions and private-sector innovations. Emphasizing research and development in clean energy technologies, including nuclear energy and advanced carbon capture and storage, can broaden the options available to address climate challenges. Power is required even when the sun is not shining and the wind is not blowing, and currently, our battery capacity is limited to a few minutes of storage. This constraint underscores the need for advancements in battery technology to ramp up energy storage dramatically. Additionally, exploring complemen-

tary energy sources and transitional options, such as hydroelectric or low-carbon traditional sources, may bridge the gap between intermittent supply and consistent demand.

We need to be more honest about the climate. This means recognizing the opportunity costs and trade-offs involved in climate choices and being cautious about relying solely on market mechanisms for emissions mitigation. We need to avoid resource nationalism and learn from the mistakes of past crises.

Climate change is undoubtedly a significant problem that demands urgent attention. However, it is not the only or ultimate problem we face. By acknowledging this reality, we can broaden our perspective and tackle other issues more effectively. This approach allows us to address not only environmental concerns, but also socioeconomic disparities, political instability, public health and other pressing challenges.

Ultimately, dealing with climate change and global warming is about limiting the damage to humans, the quality of our lives and livelihoods. If, in doing so, we significantly hurt these very things we aim to preserve, we will once again have demonstrated our proclivity for conflating means for ends.

'Net zero' is the means. Enhancing the lived experiences of humans is the goal. Let us make sure that the former does not undermine the latter. *These are the authors' personal views.*